The Toe Gizmo and Foot Corrector

by

Jan McGrath, Certified Pilates Instructor Pilates Whole Body

It was 6:30 in the morning and I laced up my tennis shoes ready for another early run. I began my jog and started noticing a radiating pain coming from the top of my left foot. It was my bone spur, once small, now becoming irritatingly large and it was rubbing up against the top of my shoe. Loosening my laces while trying to balance a secure fit, I continued to run until the pain was so excruciating, that I abruptly stopped. I could not take another step except to step into my podiatrists' office.

This was not my first time visiting a podiatrist. A few years prior, my four bunions by my big and pinky toe on both my left and right foot were all removed. I was born with poor foot structure, and I surgically had my top left foot bone spur removed.

My bunions were a result of heredity and my flat feet resulted from infancy because my arch never developed. High impact physical activities exacerbated the development of my once small bunions to larger ones and my bone spur. I needed to change my foot life to improve my foot health. First change, I replaced my routine of high impact exercises with low impact exercises namely walking and Pilates. Second change, I discovered the Toe Gizmo and the Foot Corrector, both exercises devices specifically developed for improving foot and ankle health.

The Toe Gizmo and the Foot Corrector are two Pilates exercise pieces of equipment. Joseph Pilates, the creator of the Pilates exercise method and inventor of the Universal Reformer, designed and sought patents for the Toe Gizmo and Foot Corrector in 1922 and 1923 respectively. It was Joe who recognized that problem feet were an all-too-common occurrence. His two exercise devices reduced foot discomfort and restored proper foot function. The Toe Gizmo and Foot Corrector were Joseph Pilates' earliest invented apparatuses preceding the invention of the Universal Reformer designed in 1927.

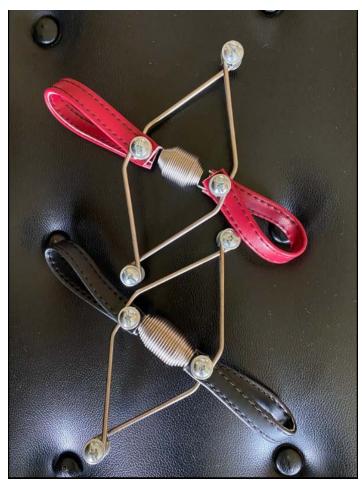


Photo courtesy of www.PilatesWholeBody.com



Photo courtesy of www.PilatesWholeBody.com

So, let's take a look at the types of foot exercises you can do using the Toe Gizmo and Foot Corrector plus how you, as a Pilates Instructor, can design a program to strengthen the intrinsic muscles of the feet to help alleviate some common foot ailments.

To begin, we need to understand the makeup of our foot is comprised of 26 bones, four arches, and many muscles, tendons, and ligaments. We have two ankle joints, and their role is to provide mobility in flexion and extension, or plantar flexion and dorsiflexion plus move us in pronation and supination.



Photo source: Almawi Limited Holistic Clinic

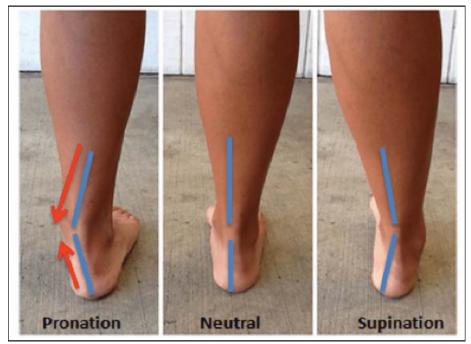


Photo source: Very Well Fit

Our four arches absorb shock and provide us propulsion. Our intrinsic foot muscles are very deep and provide structure for the arch and movement for the toes. As Pilates instructors, our ability to teach the importance of full body alignment can also be applied to the foot and the ankle. Foot and ankle alignment exercises will help our clients alleviate foot pain and correct any misalignments that cause common foot

ailments such as bunions, bone spurs, and flat feet.

Before beginning any foot and ankle exercises, first always check that your client is in talar neutral or proper ankle alignment.

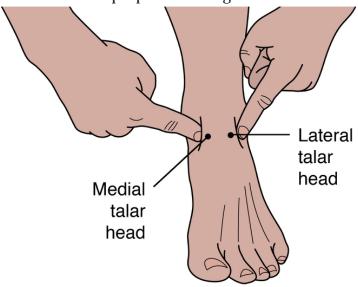
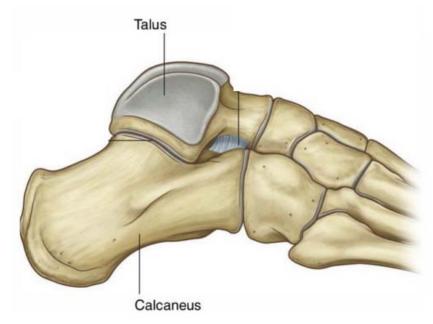


Photo: Sport Injury Bulletin

Talar or subtalar neutral is the position in which the talus ankle bone sits properly aligned on the heal bone, the calcaneus.





To find talar neutral, I have my client stand shoulder width apart without shoes and I ask my client to rotate their trunk to the left and right. This will naturally produce pronation in one ankle and supination in the other. I then place my thumb and first finger on my client's talus (ankle bone) palpating for horizontal symmetry in the talar anteriorly (in the front) as I help to rock the client's calcaneus into what would be "ballpark" subtalar neutral (see photo above). This simple tactile feedback has proven effective for my Pilates studio and does not require much time.

With practice and consistent cueing, whether verbal or tactile, I can help progress a client from doing low grade resistance Pilates exercise or stretch (wall sit or lunge) to a more weight bearing resistance Pilates exercise such as squats all awhile holding subtalar neutral.

While in talar neutral, you can start foot exercises with the Toe Gizmo. You can use this exercise device to strengthen the intrinsic toe muscles, especially the flexor muscles of the big and small toes. Starting with your big toe, begin by placing the leather band around the fattest part of your toe and then extend the strap vertically to provide spring resistance for this exercise. Then you will use your big toe flexor muscles to press down against the spring resistance. This is a great exercise because it separates out each toe. You will move down the toes one by one, and you will find it more difficult as you move away from the big toe. You may need to reduce the resistance as you move down your toes.



Photo: www.PilatesWholeBody.com

The Toe Gizmo can also be an effective stretch for the toes. Wrapping the leather band around the big toe, you will pull out horizontally using the spring resistance to provide a

stretch for the adductor hallucis, the muscle that pulls the big toe laterally towards the other four toes. If the adductor hallucis is tight, over time, a bunion forms. Moving the toe laterally resisting the spring load is an effective stretch exercise.



 $Photo: \ www. Pilates Whole Body. com$

Another foot specific exercise device is the Foot Corrector. Like the Toe Gizmo, it too can help strengthen the intrinsic foot muscles and help alleviate some of the common external (non-hereditary) foot ailments.

Starting from talar neutral, place your heel at one end of the foot corrector and then wrap your toes gently around the saddle. Rock the saddle back with no pressure pressed downward. This initial exercise gently strengthens your toe joint. Next, keeping your toes curled, you will move the toes from the apex of the saddle and now place the ball of your foot on the saddle. Once again, press downward while keeping your heel down.



Photo: www.PilatesWholeBody.com



Continue downward press exercise by placing the metatarsals on the saddle. The metatarsals are the five long bones in the middle of your foot. Holding your toe curls and keeping your heel down on the foot corrector, push down on the saddle. You want to keep your anterior tibialis as quiet as possible. The anterior tibialis is a small muscle from the lower part of the tibia. Finally, have your client place their heel on the apex of the saddle and have them push down.



 $Photo: \ www. Pilates Whole Body. com$

Both the Toe Gizmo and the Foot Corrector can be very useful when designing a program to help your client strengthen their foot muscles and to help alleviate some of the common foot ailments such as bunions, flat feet, and plantar fasciitis.

Sources:

- 1. <u>Caged Lion</u>: Joseph Pilates & His Legacy, John Howard Steel
- 2. Continuing Education Healthy Feet Webinar Coursework, Pilates Instructor Academy



Jan McGrath is a Certified Pilates Instructor running her at-home Pilates studio in the Black Hills of South Dakota. Jan discovered Pilates over 18 years ago, loving the low-impact exercise, seeing it as a great carry over exercise for young and old. She is a wife and mom to two teen sons and, when not practicing or teaching Pilates, enjoys playing the piano.